GREEN BANKING STRATEGIES IN INDIAN BANKS: CASE STUDY OF SELECTED BANKS IN MAHARASHTRA

RESEARCH PROPOSAL SUBMITTED

TO

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED

FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

COMMERCE

UNDER THE FACULTY OF COMMERCE & MANAGEMENT SCIENCES

By

Miss. Snehal V. Swami

UNDER THE GUIDANCE OF

Prof. Dr. Mrs. Vani Nikhil Laturkar

School of Commerce and Management Sciences

Swami Ramanand Teerth Marathwada University Nanded

December 2024

INDEX

Sr. No.	TOPIC	Page No.
1.	Introduction	1
2.	Review of Literature	3
3.	Statement of the Problem	4
4.	Objectives of the Study	4
5.	Null Hypothesis of the Study	4
6.	Need of the Study	5
7.	Research Methodology	12
8.	Limitations of the Study	16
9.	Chapter Plan	16
10.	Bibliography	17

1. INTRODUCTION

In 2015, all the countries in the United Nations adopted the 2030 Agenda for Sustainable Development. It sets out 17 Goals, which include 169 targets. The short titles of the 17 SDGs are: No poverty (SDG 1), Zero hunger (SDG 2),Good health and well-being (SDG 3), Quality education (SDG 4), Gender equality (SDG 5) Clean water and sanitation (SDG 6), Affordable and clean energy (SDG 7), Decent work and economic growth (SDG8), Industry, innovation and infrastructure(SDG 9), Reduced inequalities (SDG 10), Sustainable cities and communities (SDG11), Responsible consumption and production (SDG 12), Climate action (SDG 13), Life below water (SDG 14), Life on land (SDG 15), Peace, justice, and strong institutions (SDG 16), and Partnerships for the goals (SDG 17).

In the broadest sense, sustainability refers to the ability to maintain or support a process continuously over time. In business and policy contexts, sustainability seeks to prevent the continuously over time. In business and policy contexts, sustainability seeks to prevent the depletion of natural or physical resources, so that they will remain available for the long term. Sustainability is ability to maintain or support a process over time. Sustainability is often broken into three core concepts: economic, environmental, and social. Many businesses and governments have committed to sustainable goals, such as reducing their environmental footprints and conserving resources. Some investors are actively embracing sustainability investments, known as" green investments." It is also called as an ethical bank or a sustainable bank.

SDGs which are promoted through green banking:

1. Affordable and clean energy
2. Clean water and sanitation
3. Decent work and economic growth
4. Industry, innovation and infrastructure
5. Sustainable cities and communities
6. Climate action
7. Life below water
8. Life on land

1.1 Green Banking

Green banking is like a normal bank, which considers all the social and environmental/ecological factors with an aim to protect the environment and conserve natural resources. It is also called as an ethical bank or a sustainable bank. They are controlled by the same authorities but with an additional agenda toward taking care of the Earth's environment/habitats/resources. In a world where both cheap credit and measures to protect the environment are few and far between, there is in fact a banking initiative which is combining both. Green banking encompasses everything

from a loan to purchase an energy efficient car, cash to help save energy in the home, and loans for businesses who want to go green. As green initiatives sweep across the globe, more and more financial institutions are taking note and taking action. The approach to green banking or sustainable banking as it is also known varies from organization to organization. However, one definition is that is sustainable banking means using all of the banks resources with responsibility and care, avoiding waste and giving priority to choices that take sustainability into account. Banks, like corporate clients, have realized that sustainability and profitability go hand in hand as organizations looks to cut costs, streamline operations and create long-term processes. Green banking will not only ensure the greening of industry but it will also facilitate in improving the asset quality of banks in future. One of the major agents influencing overall industrial activity and economic growth is the financial institution such as banking sector, multilateral agencies, multilateral financial and development institutions has great role for providing environmentally responsible/ socially responsible investment projects.

"Green Banking is an effort by the banks to make the industries grow green and in the process restore the natural environment." It means combining operational improvements and technology, and changing client habits. For example, remote deposit means growth without bricks and mortar, ACH payments slash outgoing mail and e statements save trees -- money spent on these initiatives will bring returns long after the current period of tight belts. Green Bank looks at green banking in three areas -- operational, technological and client acceptance. Improvements have been made in the operational area such as replacing daily courier service with scans and electronic delivery. All of the employees receive paychecks and reimbursement checks electronically. There are different ways in becoming green with banking :

a. Green Accounts
b. Online Statements
c. Internet Banking Registration

It means receiving monthly statement electronically instead of traditional Banking statements. In this way one is helping in reduction of paper consumption and waste. A good online banking system is the linchpin of reduced costs, improved performance and competitiveness.

1.2 Green Banking Products

- Green credit cards
- Green savings accounts
- Green checking accounts
- Green mortgages
- Green loans
- Green CDs

- Green money market accounts
- Mobile Banking
- Online banking
- Remote deposit (RDC)

2. REVIEW OF LITERATURE

Rajesh & Dileep (2014) studied the role of banks in sustainable economic development through Green Banking activities. The study was based on secondary data obtained from the reports of various Banks, various seminars and workshop information and other relative information published on the banks and other internet sites. The study concluded that Banks also contribute to ecological footprint directly and indirectly through investment/lending in their customer enterprises. Green banking can be an avenue to reduce pollution and save the environment aiding sustainable economic growth. Before making the decision to finance a project, banks must see its environmental risks and ensure the project players have environmental safety measures in their plans, including recycling facilities or smoke and gas arresting units**.**

Jha and Bhome (2013) conduct a similar survey as stated above to check and thereby create consumer awareness on Green Banking. Conducting interviews and using specially structured questionnaires for survey they state certain steps needed in Green Banking. Online Banking, Green Checking Accounts (ATM, Special Touch Screens), Green loans (low rate to those who wish to buy solar equipment) for supporting environment friendly residential projects, power saving equipment, Green Credit Cards, Paper Saving Mobile Banking are among few steps suggested by them. Green Banking will ensure organization's move towards sustainability.

Bahl (2012) highlighted the means to create awareness in internal as well as sub system among target groups and import education to attain Sustainable development through green banking and also enumerated the effective methods for Green banking and also analyzed the strategies that helped in promoting green banking. The data was based upon primary and secondary data. The study revealed that the weekly green news on preferred choice as effective mean followed to create awareness among managers and personnel as internal subsystem to attain sustainable development through green banking. The study also depicted that event meetings, media and websites had been rated as the most effective means of creating awareness as external subsystem among clients, subsidiaries and general public to attain sustainable development through green banking.

Yadav and Pathak (2013) look at how private and public banks use green banking strategies to protect the environment. Using a case study approach, they discover that Indian banks have recognized the significance of environmental responsibility. In addition, the study reveals that, with the exception of ICICI Bank, public sector banks have taken more initiative than private sector banks. Only ICICI Bank's strategy is sustainable in the private sector.

3. STATEMENT OF PROBLEM

1. Credit Risk :- Credit risk arises due to lending to those customers whose businesses are effected by the cost of pollution, change in environmental regulation and new requirements of emission level. In addition, debtors running the risk of defaulting on loans as a result of environmental obligations brought on by fines and legal obligations, as well as the reduced priority of repayment under bankruptcy.

2. Legal Risk :- Banks like other companies are at risk if they themselves do not comply with relevant environmental legislation. But more specifically, they are at risk of direct lender liability for clean up costs or claim for damages if they have actually taken possession of contaminated or pollution causing assets.

3. Diversification Problem :- Green banks restrict their business transaction to those business entities who qualify screening process done by green banks. With limited number of customers they will have a smaller base to support them.

4. High operating cost :- Green bank requires talented and experienced staff to provide proper services to customers. Experienced loan officers are needed, they give additional experience in dealing with green business and customers.

5. Start-up face:- Many banks in green business are very new and are in start-up face. Generally it takes 3 to4 years for a bank to start making money. Thus it does not help banks during recession.

6. Lack of government support.

7. Less enthusiasm from the banks.

8. No formal and independent Authority

4. OBJECTIVES OF THE STUDY

1. To study the efforts made by bank in green banking initiatives.
2. To study the impact of green banking on functions of bank and other stakeholders.
3. To analyze the green banking vis-à-vis sustainable developmental goals.
4. To evaluate different green banking initiatives and strategies of select banks.

5. NULL HYPOTHESIS OF THE STUDY

I. H0: There is no association between usage of Green Banking services and expertise available in existing employees of sample banks.
II. H0: The banks are implementing green banking in operational areas.
III. H0: The banks are implementing green banking in technological areas.

IV. H0: The banks are implementing green banking in client acceptance areas
V. H0: The banks are providing loans at concessional rates to environment friendly products and projects.
VI. H0: Banks are incurring high operating costs for implementing green banking strategies.

VII. H0: There is a lack of support from government in promoting green banking initiatives.
VIII. H0: The banks are taking genuine efforts in creating awareness amongst public about green banking initiatives they are taking.

6. NEED OF THE STUDY

Green banking boosts a bank's competitive edge by promoting investments in sustainable, low-carbon industries that attract eco-conscious investors, especially in renewable energy. Its main goal is to facilitate the efficient flow of cash within the economy, connecting national economies with the global financial system. In a green economy, job and income growth stem from public and private investments aimed at reducing carbon emissions and pollution. This also enhances energy efficiency and protects biodiversity. Green banking seeks to shift stakeholders' perspectives on environmental sustainability by implementing eco-friendly practices and innovative financial products, ultimately reducing carbon footprints and waste.

Green banking is transforming stakeholders' mindsets and habits regarding environmental issues. Itinvolves environmentally-friendly practices and policies, social responsibilities, and innovative greenfinancial products and services designed to reduce carbon footprints and minimize waste. Greenbanking is indispensable in the contemporary landscape for multifaceted reasons, such as climatechange and resource depletion, green banking emerges as a pivotal advocate for environmentallyconscious practices. It encourages financial institutions to invest in sustainable projects,renewable energy ventures, and eco-friendly initiatives, actively contributing to environmentalpreservation. As consumers increasingly gravitate towards socially responsible businesses, banksengaged in green practices not only attract environmentally conscious customers but also bolstertheir reputation by aligning with ethical and sustainable values.

7. Profile of selected Financial Institutions/Bankers

7.1 NABARD
7.2 Private sector banks
7.3 Public sector banks

7.1 NABARD

NABARD is an abbreviation for the National Bank for Agriculture and Rural Development.NABARD manages all credit-related concerns for agricultural and rural enterprises, including policy, planning, and operations. In general, the national bank for agriculture and rural development, oversees the funding of any agricultural operations related to rural development in India, as the institution's principal purpose is the nationwide growth of India's rural community. NABARD works in three areas: development, supervision, and funding.

1. Refinancing

NABARD serves as an apex financing agency for the institutions providing investment andsproduction credit for promoting the various developmental activities in rural areas. It coordinates the rural financing activities of all institutions engaged in developmental work at the field level and maintains liaison with the Government of India, state governments, Reserve Bank of India (RBI) and other national level institutions concerned with policy formulation. It also refinances fund from World Bank and Asian Development Bank to state co-operative agriculture and rural development banks (SCARDBs), state co-operative banks (SCBs), regional rural banks (RRBs), commercial banks (CBs) and other financial institutions approved by RBI. While the ultimate beneficiaries of investment credit can be individuals, partnership concerns, companies, State-owned corporations or co-operative societies, production credit is generally given to individuals.

2. Banking Supervision

NABARD supervises State Cooperative Banks (StCBs), District Cooperative Central Banks (DCCBs), and Regional Rural Banks (RRBs) and conducts statutory inspections of these banks. It akes measures towards institution building for improving absorptive capacity of the credit delivery system, including monitoring, formulation of rehabilitation schemes, restructuring of credit institutions, training of personnel, etc. It also undertakes monitoring and evaluation of projects refinanced by it.

3. Development

NABARD is also known for its 'SHG Bank Linkage Programme' which encourages India's banks to lend to self-help groups (SHGs). Largely because SHGs are composed mainly of poor women, this has evolved into an important Indian tool for microfinance. By March 2006, 22 lakh SHGs representing 3.3 crore members had to be linked to credit through this programme. NABARD also has a portfolio of Natural Resource Management Programmes involving diverse fields like Watershed Development, Tribal Development and Farm Innovation through dedicated funds set up for the purpose.

Subsidiaries of NABARD

NABARD has seven subsidiaries, established to leverage the institute's expertise with its own specialists catering to specific sectors.

1. NABKISAN

The main objective of the NABKISAN is to provide credit for promotion, expansion and commercialization of enterprises in agriculture, allied and rural non-farm activities. It has extended support to 550 FPOs across various states in the country with cumulative assistance of more than Rs. 225 crore.

2. NABSAMRUDDHI

The objective of NABSAMRUDDHI is to provide credit facilities to legal entities for promotion, expansion, commercialization and modernization in non-farm activities including micro finance, MSME, housing, education, transport, etc. In March 2024, it launched the first phase of a nationwide funding awareness campaign, 'Climate Ready WASH', for women joint liability group (JLG) borrowers of microfinance institutions, to take forward the common mandate of sustainable rural development.

3. NABFINS

NABFINS' approach to the business of microfinance is defined by its tagline "Balancing Business with Inclusion". It adopts a unique model which leverages social collateral provided by the Self Help Groups (SHGs) & Joint Liability Groups (JLGs) by offering micro- credit at their doorstep, at the lowest interest rate among NBFC-MFIs to low income households, comprising predominantly women

.

4. NABFOUNDATION

NABFOUNDATION is Non-Profit entity of NABARD which was established for executing impactful projects either on its own, or, in partnership with other stakeholders (like civil society organizations, agri-universities, Government departments and CSR outfits of both public and private organizations). In 2021, it has entered into an Memorandum of Understanding (MoU) with Dalmia Bharat Foundation to develop a unique skill mapping programme for unemployed youths in all the North Eastern states of Assam, Sikkim, Arunachal Pradesh, Nagaland, Mizoram, Manipur, Meghalaya and Tripura. An MoU was signed between NABFOUNDATION and Dalmia Bharat Foundation (DBF) in Delhi recently to collaborate on the project. NABSAMRUDDHI and NABFINS, two other subsidiaries of NABARD, have also stepped forward to support this unique initiative.

5. NABCONS

It is a Consultancy Wing of NABARD. NABCONS' objective is to provide consultancy in all spheres of agriculture, rural development and allied areas. In 2023, the agriculture department in Kerala state was on the verge of creating the first-ever Digital Crop Survey (DCS). The implementation of this programme was to be carried out by NABCONS.

6. NABVENTURES

It is the Investment Manager of NABVENTURES Fund I with a target corpus of INR 500 crore. The fund focus on investments in early to mid-stage start-ups in agriculture, agtech, agri-biotech, food, agri /rural fintech and rural businesses.

7. NABSanrakshan

It aims to carry out credit guarantee and related activities towards sustainable and equitable agriculture and rural development.

Major Stakeholders

1. Government of India
2. Reserve Bank of India
3. NABARD (including management & employees)
4. State Governments Govt. Corporations
5. Commercial Banks
6. Regional Rural Banks
7. State Cooperative Banks
8. DCCBs PACS
9. SCARDBs PCARDBs

Farmers, FPOs, SHGs, JLGs, Federations, Agripreneurs, Artisans, Rural Entrepreneurs

1. International Funding Agencies – KfW, GIZ, etc. UNFCCC – AF, GCF
2. MFIs/NBFCs, NGOs, Trusts
3. Academic Institutions, Universities, Corporate Sector, Private Entities

7.2 Selected Public Sector Banks

Public sector banks (PSBs) in India are government-owned banks where the majority stake (more than 50%) is held by the government. These banks are established to provide financial services and promote economic development.

Public sector banks offer various types of loans, like personal loans, car loans, home loans, education loans and even credit cards. When a person deposits money in the bank, they earn interest on that amount. The bank then uses this deposited money to give out loans, and they charge interest on those loans to make money.

Few of the public sector banks in India:

PUBLIC SECTOR BANK	RANKS
State Bank of India	1
Punjab National Bank	2
Bank of Baroda	3
Canara Bank	4
Union Bank	5
Bank of India	6
Indian Bank	7
Central Bank of India	8
Indian Overseas Bank	9
UCO Bank	10
Bank of Maharashtra	11
Punjab and Sind Bank	12

Public Sector Banks which got merged after 2020:

Below is the list of the largest nationalized banks which got merged. In this merger, the six public sector banks merged with six independent public sector banks.

GOVERNMENT BANK	MERGED TO
Oriental Bank of Commerce, United Bank	Punjab National Bank
Andhra Bank, and Corporation Bank	Union Bank of India
Syndicate Bank	Canara Bank
Allahabad Bank	Indian Bank

Government banks, popular known as Public sector banks are commercial banks which are governed by the Indian Government and the majority of their shares are held by the central as well as state governments. Previously, there were 27 public sector banks in India but after August 2019, some of the banks were banks were merged into larger ones. After merging, the total number of public sector banks stand 12.

Presently, there are 12 public banks in the country namely, the State Bank of India, Bank of Baroda, Central Bank of India, Canara Bank, Punjab National Bank, Bank of Maharashtra, Union Bank of India, UCO Bank, Indian Bank, Punjab and Sind Bank, and Bank of India.

1. **State Bank of India**

The State Bank of India is considered as the largest public sector bank of India because around 56.92% shares of the bank are held by the government of India. Established in 1955, the bank has total number of branches of 22,141 and 58,555 ATMs across the country. The headquarter of the SBI is situated in Mumbai, Maharashtra.

Not only this but also the SBI ranks 221st in the list of 500 biggest organizations across the world according to the fortune global in 2020 and it is ranked 43rd in the list of the largest banks in the world. As of 2021, the total wealth of the bank is USD 680 billion which if converted into Indian currency is Rs.4845619 crore. On the other hand, the net income of SBI is USD 3.1 billion which Rs.22,405 crore as of 2021. According to the survey conducted in March 2021, around 245642 employees are working in the SBI which makes it the fifth largest employer in the entire banking sector of the country. Presently, the chairman of the SBI is Dinesh Kumar Khara. The online banking services of the SBI can be availed at www.onlinesbi.com. Recently, all the associate banks of the SBI were merged in the State Bank of India such as State Bank of Hyderabad, State Bank of Bikaner & Jaipur, State Bank of Indore, State Bank of Saurashtra, State Bank of Mysore, State Bank of Travancore, and Bhartiya Mahila Bank.

2. Punjab National Bank

Punjab National Bank is the second largest and nationalized bank in the country where the government holds 76.87% shares. Founded on 12 April 1894 by Dyal Singh Majithia Lala Lajpat Rai, the bank is headquartered in Dwarka, New Delhi. Presently, the CEO and MD of the PNB is CH S. S, Mallikarjuna Rao. It has 12248 branches and over 13,000 ATMs across the country. Around 103000 people work in the Punjab National Bank. The total assets of the bank are USD 180 billion which in Indian currency is Rs.1279725 crore as of 2021. The net income of the bank, on the other hand is USD 300 million and in Indian currency is Rs.2152 crore. The bank has over180 million customers. United Bank of India and Oriental Bank of Commerce were merged in Punjab National Bank. The bank's official website is www.pnbindia.com

3. Union Bank of India

Union Bank of India was established on 11 November 1919. The MD and CEO of the bank is Shri Rajkiran Rai G. Dinesh Kumar Garg, Manas Ranjan, and Gopal Singh Gusain are the Executive Directors. It has 9609 branches across India as well as abroad. The overall wealth of the bank is USD 78 billion and in Indian currency it is Rs.531 crores. Presently, the bank has 75,000 employees and more than 120 million customers. The headquarter of the Union Bank of India is in Mumbai, Maharashtra. Andhra Bank and Corporation Bank merged in Union Bank of India. The official website of the bank is www.unionbank of india.co.in

7.3 Private Sector Bank

Private sector banks are those banks that are operated by a group of individuals or a group of companies that have no dependency on the government. Although, private sector banks are bound to comply with the rules laid down by the government of that particular country. The prime objective of a private sector bank is only to maximize its profits and provide banking and financial services to the country's residents.

Private sector banks differ in many ways compared to other public or government banks. Since private shareholders own a private sector bank, there is a good scope for better and independent decision- making. Along with this, the top private banks in India 2024 also promote a customer- centric approach along with efficient risk management practices. In India, private sector banks coexist with public sector banks, allowing customers to choose a more diverse baking sector. Moreover, the presence of the best private banks in India has often led to increased efficiency, innovation, and better customer service in the banking industry.

List of Top 10 Private Banks in India 2024

Based on the latest data, here is a list of 10 top private banks in India in 2024.

Bank Name	Total Branches	Total ATMs	City of Headquarter
HDFC Bank	7915	20565	Mumbai
ICICI Bank	6074	16927	Mumbai
Axis Bank	5000	15751	Mumbai
Kotak Mahindra Bank	1996	2963	Mumbai
IDBI Bank	1900	3300	Mumbai
Federal Bank	1355	1914	Aluva
Induslnd Bank	2606	2878	Pune
RBL Bank	517	414	Mumbai
J&K Bank	996	1414	Srinagar

Here is a summary of the top private banks in India with their market cap and profits :

Bank Name	Profit (Rs.)	Market Cap
HDFC Bank	46440 Cr.	11.05 Trillion
ICICI Bank	31,896 Cr.	7.01 Trillion
Axis Bank	6,071 Cr.	3.27 Trillion
Kotak Mahindra Bank	4,264 Cr.	3.56 Trillion
IDBI Bank	1,458 Cr.	903.91 Billion
Yes Bank	153 Cr.	709.58 Billion
Federal Bank	3,010 Cr.	346.24 Billion
Induslnd Bank	2,043 Cr.	1.16 Trillion
RBL Bank	233 Cr.	156.76 Billion
J&K Bank	1197 Cr.	143.42 Billion

1. HDFC Bank

HDFC Bank is one of the best private banks in India and the world's sixth-largest bank. Founded in 1994, HDFC is known for its innovative thinking, excellent customer service, and surplus technology integration in its services. Being one of the largest Indian banks, HDFC impacts the Indian economy to a great extent. The primary services of HDFC Bank include financial aid, wealth management, loans, and much more.

Moreover, with its advanced approach towards technology, HDFC has also made its services digitally available for the ease of its vast customer base.

The bank has Reported Net Income: 39610 Cr. And Revenue is 1,15,016 Cr., Branches: 7915 and 20565 ATMs are distributed, Employment Generated: 1,77,000. NIM: 3.4%.

Facilities Offered: Home Loans, Education Loans, Mutual Funds, Mortgages, Banking Services, Money Transfers, Cards, and Deposits.

2. ICICI Bank

The ICICI Bank is also among the best private banks in India 2024. With a complete pool of financial banking services, the bank also provides facilities relating to wealth management, international banking, and much more. As one of the top private banks in India, the ICICI Bank is known to impact India's economy significantly. Moreover, with its innovative approach and technology integration in recent times, ICICI has become a prime choice for people in the country.

The bank has Reported Net Income: 18,678 Cr. And Revenue is 1,86,179 Cr., Branches: 6074 and 16927 ATMs are distributed , Employment Generated: 1,30,542. NIM: 4.90% .

Facilities Offered: Home Loans, Education Loans, Mutual Funds, Mortgages, Banking Services, Money Transfers, Cards, and Deposits.

3. AXIS Bank

Founded in 1993, the Axis Bank has its headquarters in Mumbai, India. The bank has managed to be among the top private banks in India in a concise period. With its quick services and constant updates to adopt new technologies, Axis Bank has been a great competitor in the race for the leading private sector bank. The bank has a vast customer base, making it the third largest and one of the best private banks in India.

The bank has Reported Net Income : 11,742 Cr., And Revenue is 1,06,155 Cr., Branches: 5000 and 15751 ATMs are distributed, Employment Generated: 91,898. NIM: 2% .

Facilities Offered: Loans, Cards, Accounts, Deposits, Insurance, Others.

8. RESEARCH METHODOLOGY

The present study is based on secondary data which is collected from annual reports of the respective banks, reports of the RBI, time to time news published in various newspapers, web sites of the banks and research articles published in the relevant field.

8.1 Data Collection :

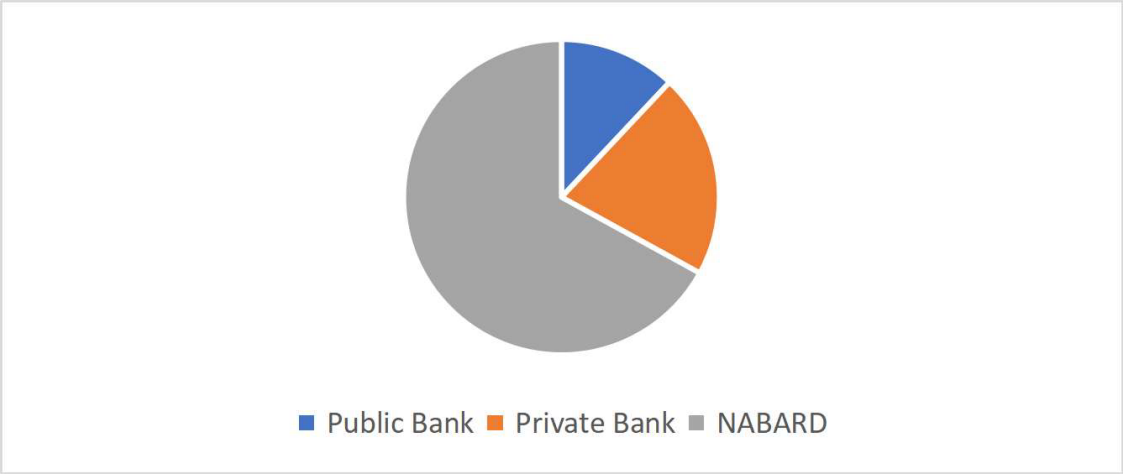
The present study is based on primary as well as secondary data sources. Data is collected from the customers and employees of bank branches. The study is confined to only to NABARD, three public sector banks (State Bank India, Bank of Baroda and Punjab National Bank) and three private sector banks (Industrial Credit and Investment Corporation Bank of India (ICICI), Housing Development Finance Corporation Bank (HDFC) and Axis bank). These are the top three public and private sector banks based on their green banking initiatives. For gathering information about the green banking activities undertaken by the banks that is mainly based on the annual reports of the selected banks. Business Responsibly Reports, official websites of the respective banks and primary data collected from bank officials and benificiaries.

Primary Data: Primary data will be collected by administering a well-structured questionnaire and interviews.

Secondary Data: This data collection will be accessed from various sources such as the banks official website, annual reports, sustainability reports, articles etc.

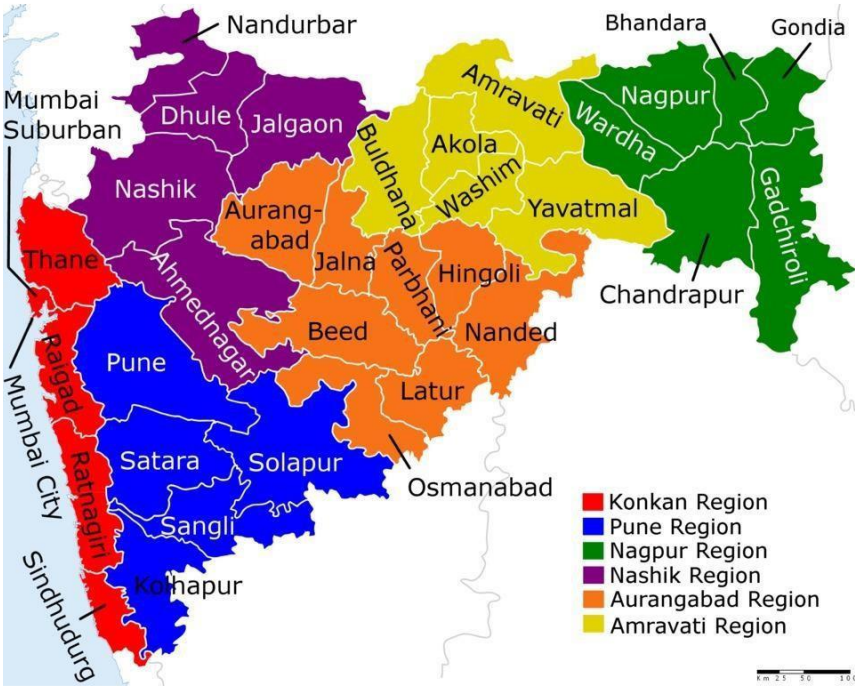
8.2 Sampling

There are total 12 public sector in India in 2024 and 21 private sector banks in India in 2024. Green banking initiatives by major banks in India.



There are 6 Region from point of view of green banking initiatives. We are selecting following 3 banks from public sector 3 banks i.e. 25% of population and 3 from private sector i.e. 14% of population and NABARD. Average sampling comes to 18% of total population with NABARD being additional sample as it caters to green economy specifically.

Sample extracted from Maharashtra by various banks



Public Bank : 1) SBI Bank 2) PNB Bank 3) UNION Bank

Private Bank : 1) HDFC Bank 2) ICICI Bank 3) AXIS Bank and NABARD.

The total population of branches of these selected banks in Maharashtra Region wise is as follows.

1. No. of branches in Kokan Region

	Name of banks						NABARD
Region	**SBI**	**PNB**	**UNION**	**HDFC**	**ICICI**	**AXIS**	**OFFICE**
Thane	157	13	47	56	62	54	01
Raigad	75	05	12	22	23	17	01
Ratnagiri	33	03	12	13	13	03	-
Sindhudurg	26	25	09	06	03	03	-
Mumbai suburban	09	105	06	125	35	12	-
Mumbai city	33	77	73	125	35	27	01

2. No. of branches in Pune Region

	Name of banks						NABARD
Region	**SBI**	**PNB**	**UNION**	**HDFC**	**ICICI**	**AXIS**	**OFFICE**
Pune	**186**	**23**	**98**	**65**	**36**	**83**	**01**
Satara	**52**	**03**	**10**	**12**	**08**	**08**	**-**
Sangli	**37**	**03**	**25**	**14**	**21**	**06**	**-**
Kolhapur	**57**	**11**	**21**	**60**	**33**	**04**	**01**
solapur	**53**	**03**	**17**	**10**	**25**	**11**	**-**

3. No. Of branches in Nagpur Region

	Name of banks						NABARD
Region	**SBI**	**PNB**	**UNION**	**HDFC**	**ICICI**	**AXIS**	**OFFICE**
Nagpur	120	56	55	35	12	22	01
Wardha	35	07	03	10	01	06	01
Bhandara	27	01	05	03	04	02	01
Gondia	09	03	02	05	01	03	01
Chandrapur	42	04	03	13	03	20	01
Gadchiroli	01	01	21	20	01	05	01

4. No. of branches in Nashik Region

	Name of banks						NABARD
Region	**SBI**	**PNB**	**UNION**	**HDFC**	**ICICI**	**AXIS**	**OFFICE**
Nashik	118	18	34	51	26	23	01
Ahmednagar	70	08	24	22	11	26	01
Jalgaon	69	07	20	25	16	11	-
Dhule	42	02	11	08	06	06	01
Nandurbar	04	01	05	07	02	02	-

5. No. of branches in Aurangabad Region

	Name of banks						NABARD
Region	**SBI**	**PNB**	**UNION**	**HDFC**	**ICICI**	**AXIS**	**OFFICE**
Aurangabad	106	12	09	16	12	09	01
Jalna	30	01	05	05	03	04	01
Beed	53	01	01	02	11	02	01
Parbhani	47	01	03	09	07	12	37
Latur	57	02	02	06	14	01	-
Hingoli	16	02	02	07	04	02	-
Nanded	77	02	04	03	02	05	01
Osmanabad	36	01	03	06	06	03	-

6. NO. of branches in Amravati Region

	Name of banks						NABARD
Region	**SBI**	**PNB**	**UNION**	**HDFC**	**ICICI**	**AXIS**	**OFFICE**
Amravati	57	04	13	10	06	09	01
Yavatmal	53	03	12	10	04	05	01
Washim	04	01	01	05	01	04	-
Akola	46	03	07	08	02	03	-
Buldhana	53	03	02	12	07	06	01

Looking at table above the researcher has come to the conclusion that the branches within the region are unevenly spread. Therefore, 10 branches each in each region of each bank and minimum 1 office of NABARD in each region is selected on the basis of equal quota sampling. This constitutes a sampling of total 60 bank branches of 6 banks and 6 offices in NABARD forming the part of find sample the primary data will be collected from this branches in two ways. Structured questionnaire use to collect response of minimum 3 officers each branch and open ended interview with available benificiaries (clints & banks) through random sampling.

9. LIMITATION OF STUDY

Limited to time responses receive from respondents and from selected banks.

10. CHAPTER PLA

1. Introduction
2. Research Methodology Chapter
3. Review of literature Chapter
4. Theoretical Background Chapter
5. Data Analysis and Interpretation Chapter
6. Conclusion and suggestion

11. BIBLIOGRAPHY

1) Jha & Bhome (2013), "A study of Green Banking trends in India" International Monthly Refereed Journal of Research In Management & Technology, Vol. 2.

2) Bahl Sarita (2012) "The role of green banking in sustainable growth", International journal of marketing, financial services & management research, Vol.1 (2)

3) Ravi Meena (2013), "Green Banking: As Initiative for Sustainable Development" Global Journal of Management and Business Studies, Vol. 3(10).

4) Yadav, R. & Pathak, G. (2013). Environmental Sustainability through Green Banking: A Study on Private and Public Sector Bank in India. OIDA International Journal of Sustainable Development. Vol 6(08), 37-48. Retrieved from SSRN on 27 January 2015 from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2385573.

5) ICICI Bank. (2014, 03 10). Go Green: ICICI Bank. Retrieved from ICICI Bank:

6) Punjab National Bank Website -https://www.pnbindia.in/en/ui/profile.aspx

7) HDFC Bank. (2013). Annual Business Responsibility Report 2012-2013. Mumbai: HDFC Bank

Dr. (Mrs.) V. N. Laturkar
(Research Guide)

Miss Snehal V. Swami
(Research Student)